DATE: 04/30/2001

RAW SEQUENCE LISTING

OIPE

PATENT APPLICATION: US/09/832,501 TIME: 09:15:46 Input Set : A:\PF542SL.txt Output Set: N:\CRF3\04302001\1832501.raw 3 <110> APPLICANT: Ballance, David J. Sleep, Darrell Turner, Andrew J. 5 6 Sadeghi, Homa **ENTERED** Prior, Christopher P. 9 <120> TITLE OF INVENTION: Albumin Fusion Proteins 11 <130> FILE REFERENCE: PF542 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/832,501 14 <141 > CURRENT FILING DATE: 2001-04-12 16 <150 > PRIOR APPLICATION NUMBER: 60/229,358 17 <151> PRIOR FILING DATE: 2000-04-12 19 <150 > PRIOR APPLICATION NUMBER: 60/256,931 20 <151> PRIOR FILING DATE: 2000-12-21 22 <150> PRIOR APPLICATION NUMBER: 60/199,384 23 <151> PRIOR FILING DATE: 2000-04-25 25 <160> NUMBER OF SEQ ID NOS: 37 27 <170> SOFTWARE: PatentIn Ver. 2.1 29 <210> SEQ ID NO: 1 30 <211> LENGTH: 23 31 <212> TYPE: DNA 32 <213> ORGANISM: Artificial Sequence 34 <220> FEATURE: 35 <221> NAME/KEY: primer\_bind 36 <223> OTHER INFORMATION: primer useful to clone human growth hormone cDNA 38 <400> SEQUENCE: 1 2.3 39 cocaagaatt cocttatoca ggo 42 < 210 > SEQ ID NO: 243 <211> LENGTH: 33 44 -(212> TYPE: DNA 45 - 213 > ORGANISM: Artificial Sequence 47 - 220 > FEATURE: 48 -221 > NAME/KEY: primer\_bind 49 -223> OTHER INFORMATION: primer useful to clone human growth hormone cDNA 51...400 > SEQUENCE: 233 52 gggaagetta gaageeacag gateeeteea cag 55 <210> SEQ ID NO: 3 56 < 211 > LENGTH: 16 57 <212> TYPE: DNA 58 3213> ORGANISM: Artificial Sequence 60 +1220> FEATURE: 61 - 221> NAME/KEY: misc\_structure  $62^{\circ}/223$ : OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments 63 with non-cohesive ends. 65 < 400> SEQUENCE: 3 66 gataaagatt cccaac 16 69 < 210 > SEQ ID NO: 470 <211> LENGTH: 17

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Input Set : A:\PF542SL.txt

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71 <212 · TYPE: DNA 72 < 213 - ORGANISM: Artificial Sequence 74 <220 · FEATURE: 75 < 221 - NAME/KEY: misc\_structure 76 <223 OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments with non-cohesive ends. 79 <400 > SEQUENCE: 4 17 80 aattyttggg aatcttt 83 <210> SEQ ID NO: 5 84 <211> LENGTH: 17 85 <212> TYPE: DNA 86 <113 - ORGANISM: Artificial Sequence 88 <220> FEATURE: 89 <221> NAME/KEY: misc\_structure 90 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments 91 with non-cohesive ends. 93 <400> SEQUENCE: 5 94 ttaggettat teccaae 17 97 <210> SEQ ID NO: 6 98 <211> LENGTH: 18 99 <212> TYPE: DNA 100 <213 ORGANISM: Artificial Sequence 102 <220 > FEATURE: 103 <221> NAME/KEY: misc\_structure 104 <223 > OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments with non-cohesive ends. 107 <400> SEQUENCE: 6 18 108 aattqttggg aataagcc 111 <210 - SEQ ID NO: 7 112 <211 > LENGTH: 24 114 - 213 · ORGANISM: Artificial Sequence 116 <220 - FEATURE: 117 <221> NAME/KEY: SITE 118 < 222 > LOCATION: 1)..(19)119 <223> OTHER INFORMATION: invertase leader sequence 121 <2208 FEATURE: 122 <2215 NAME/KEY: SITE 123 <222> LOCATION: 20)..(24) 124 <223> OTHER INFORMATION: first 5 amino acids of mature human serum albumin 126 <400> SEQUENCE: 7 127 Met. Leu Leu Gln Ala Phe Leu Phe Leu Leu Ala Gly Phe Ala Ala Lys 1 1.0 130 Ile Ser Ala Asp Ala His Lys Ser 131 20134 <210> SEQ ID NO: 8

135 <2115 LENGTH: 21 136 <2125 TYPE: DNA

137 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING DATE: 04/30/2001 PATENT APPLICATION: US/09/832,501 TIME: 09:15:46

Input Set : A:\PF542SL.txt

Output Set: N:\CRF3\04302001\I832501.raw

139 <220> FEATURE: 140 <221 · NAME/KEY: misc\_structure 141 <223 - OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments with non-cohesive ends. 144 <400 · SEQUENCE: 8 21 145 gagatgeaca cetgagtgag g 148 <210 · SEQ ID NO: 9 149 <211 > LENGTH: 27 150 (212> TYPE: DNA 151 <213> ORGANISM: Artificial Sequence 153 <220 > FEATURE: 154 <221> NAME/KEY: misc\_structure 155 <223 × OTHER INFORMATION: synthetic oligonucleotide used to join DNA 156 fragments with non-cohesive ends. 158 <400 > SEQUENCE: 9 159 gateetgtgg ettegatgea cacaaga 27 162 3210 > SEQ ID NO: 10 163 <211> LENGTH: 24 164 <212> TYPE: DNA 165 <213 - ORGANISM: Artificial Sequence 167 <220> FEATURE: 168 <221 > NAME/KEY: misc\_structure 169 <223 \* OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments with non-cohesive ends. 172 <400 > SEQUENCE: 10 173 etettqtqtq categaagee acaq 24 176 <210 > SEQ ID NO: 11 177 <211 > LENGTH: 30 178 <2125 TYPE: DNA 179 <213 · ORGANISM: Artificial Sequence 181 - 220 - FEATURE: 182 <221 - NAME/KEY: misc\_structure 183 <223 - OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments with non-cohesive ends. 184 186 -: 400 - SEQUENCE: 11 187 tqtqqaaqaq cctcaqaatt tattcccaac 30 190 -210 SEQ ID NO: 12 191 <2111 LENGTH: 31 192 - 212 TYPE: DNA 193 <213> ORGANISM: Artificial Sequence 195 <220% FEATURE: 196 <221 NAME/KEY: misc\_structure  $197 \cdot (223)$  OTHER INFORMATION: synthetic oligonucleotide used to join DNA 198 fragments with non-cohesive ends. 200 -: 400> SEQUENCE: 12 201 aattqttgqg aataaattct gaggctcttc c 31

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DATE: 04/30/2001 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/832,501 TIME: 09:15:46

Input Set : A:\PF542SL.txt

- Output Set: N:\CRF3\04302001\I832501.raw 207 <213> ORGANISM: Artificial Sequence 209 <220 > FEATURE: 210 <221 > NAME/KEY: misc\_structure 211 <223 - OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments with non-cohesive ends. 214 <400> SEQUENCE: 13 47 215 ttaggettag gtggeggtgg ateeggeggt ggtggatett teecaac 218 -210 > SEQ ID NO: 14 219 <211> LENGTH: 48 220 <212> TYPE: DNA 221 <213> ORGANISM: Artificial Sequence 223 <220> FEATURE: 224 <221 > NAME/KEY: misc\_structure 225 <223 > OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments with non-cohesive ends. 228 <400> SEQUENCE: 14 229 aattgttggg aaagateeac caeegeegga tecaeegeea ectaagee 4.8 232 <210> SEQ ID NO: 15 233 <211> LENGTH: 62 234 - 212> TYPE: DNA 235 <213> ORGANISM: Artificial Sequence 237 <220> FEATURE: 238 <221> NAME/KEY: misc structure 239 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments with non-cohesive ends. 240 -242 <400 > SEQUENCE: 15 243 thaqqcttag geggtggtgg atetggtgge ggeggatetg gtggeggtgg atectteeca 60 62 247 <210> SEQ ID NO: 16 248 <211> LENGTH: 63 249 <212> TYPE: DNA 250 <213> ORGANISM: Artificial Sequence 252 <220> FEATURE:
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- 254 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
- fragments with non-cohesive ends.
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- 262 <210> SEQ ID NO: 17
- 263 <211> LENGTH: 1782
- 264 2125 TYPE: DNA
- 265 <2138 ORGANISM: Homo sapiens
- 267 220> FEATURE:
- 268 <221> NAME/KEY: CDS
- $269 \times 222 > LOCATION: (1)...(1755)$
- 272 <400> SEQUENCE: 17
- 273 gat goa cac aag agt gag gtt got oat ogg tit aaa gat tig gga gaa
- 274 Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu

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						Leu											
279	314	11011	111.5	20		200		2.50	25	1114	1 110	1114	3211	30	2300	31	
	саσ	tat	сса		gaa	gat	cat	αta		tta	ata	aat.	αаа		act.	gaa	144
	_	-			-	Asp		_						_		_	
283	32	512	35		324			40	27.0	2334			45			324	
	ttt	аса	aaa	aca	tat	gtt	act	gat	qaq	tca	act	qaa	aat	tat	qac	aaa	192
		-			-	Val	-	-			-	-			-		
287		50	-		_		55	-				60		•	•	1	
289	tca	ctt	cat	acc	ctt	ttt	gga	gac	aaa	tta	tgc	aca	gtt	gca	act	ctt	240
						Phe											
291	65					70					75					0.8	
293	cgt	gaa	acc	tat	ggt	gaa	atg	gct	gac	tgc	tgt	gca	aaa	caa	gaa	cct	288
294	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	
295					85					90					95		
297	gag	aga	aat	gaa	tgc	ttc	ttg	caa	cac	aaa	gat	gac	aac	сса	aac	ctc	336
298	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	
299				100					105					110			
						cca											384
302	Pro	Arg		Val	Arg	Pro	Glu		Asp	Val	Met	Cys		Ala	Phe	His	
303			115					120					125				
	_		_	-		ttt	_								_	_	432
	Asp		Glu	Glu	Thr	Phe		Lys	Lys	Tyr	Leu	_	Glu	Ile	Ala	Arg	
307		130					135					140				_	4 () ()
						tat											481)
	-	HIS	PIO	ΙΫ́Ι	ыте	Tyr 150	Ald	PIO	GIU	Leu	155	Phe	Рпе	Ald	Lys	160	
311		222	aat	act	+++	aca	. 7 3 3	+ a +	tac	022		act	ara t	222	ant		528
			-	-		Thr		-	-			_			-		250
315	1 / 1	Lys	Ата	мта	165	1111	JIU	Cys	Cys	170	Ата	AIG	дар	гуэ	175	AIG	
	tuc	cta	t.t.a	cca		ctc	gat	gaa	ct.t.		gat	gaa	aga	aaq		t.ca	576
						Leu											
319	1			180	- 1 -				185	)			1	190			
321	tet	qcc	aaa	cag	aga	ctc	aaa	tgt	qcc	aqt	ctc	caa	aaa	ttt	qqa	qaa	624
		-				Leu											
3.23			195		_		-	200					205		-		
325	aga	qct	ttc	aaa	gca	tgg	gca	gtg	get	cgc	ctg	agc	cag	aga	ttt	CCC	672
326	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	
327		210					215					220					
329	aaa	gct	gag	ttt	gca	gaa	gt.t	tcc	aag	tta	gtg	aca	gat	ctt	acc	aaa	720
330	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	
331	225					230					235					240	
333	gtc	cac	acq	gaa	tgc	tgc	cat	gga	gat	ctg	ctt	gaa	tgt	gct	gat.	gac	768
3.34	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	
3.35					245					250					255		
			-			aag				-		-		_			816
	Arg	Ala	Asp		Ala	Lys	Tyr	Ile	_	Glu	Asn	Gln	Asp		Ile	Ser	
339				260					265					270			



## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/832,501

DATE: 04/30/2001 TIME: 09:15:47

Input Set : A:\PF542SL.txt

Output Set: N:\CRF3\04302001\1832501.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number

L:712 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 L:801 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 L:890 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27

L:980 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 L:1184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 L:1287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33